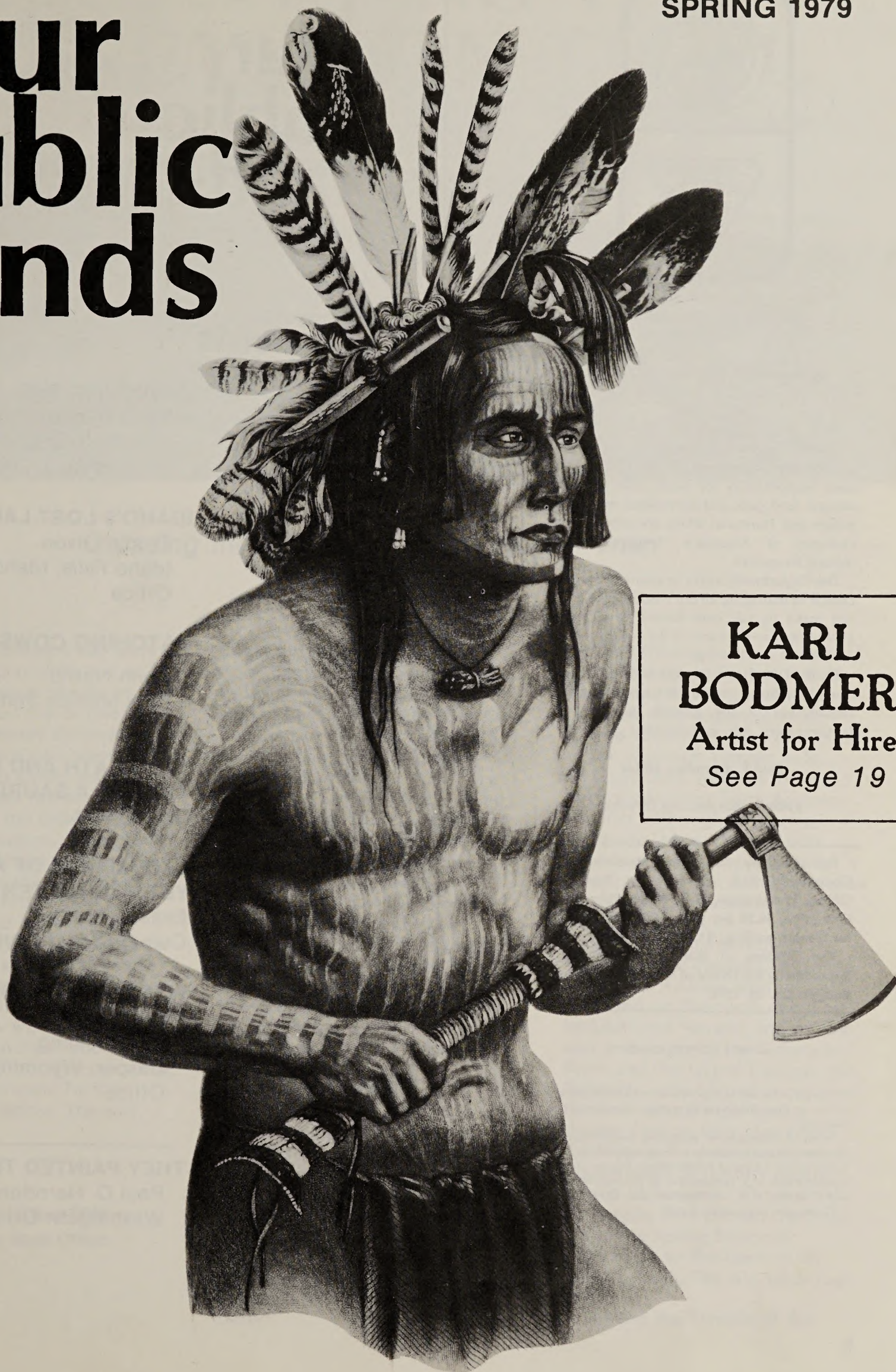


Our Public Lands

SPRING 1979



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U.S. DEPARTMENT OF THE
INTERIOR

BUREAU OF LAND MANAGEMENT

As the Nation's principal conservation agency, the Department of the Interior has basic responsibility for water, fish, wildlife, mineral, land, park, and recreational resources, Indian and Territorial affairs are other major concerns of America's "Department of Natural Resources."

The Department works to assure the wisest choice in managing all our resources to each will make its full contribution to a better United States—now and in the future.

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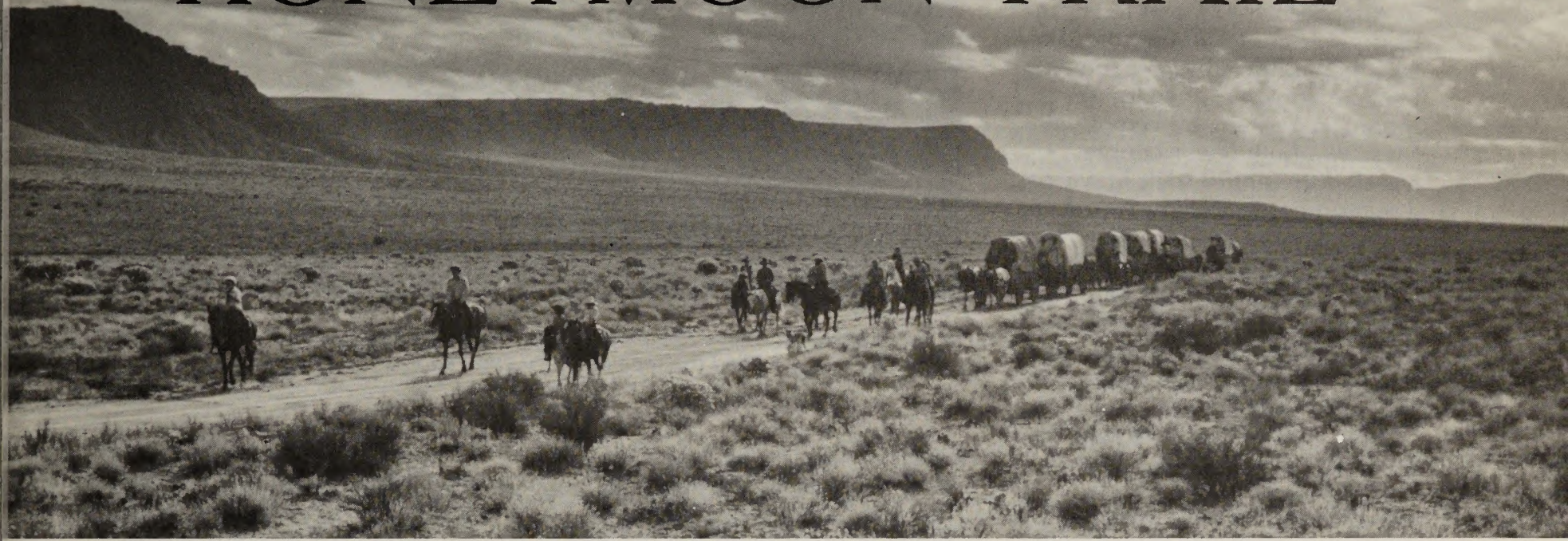
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TRAVELING THE HONEYMOON TRAIL



Crossing the Arizona Strip by Wagon Train

It had been a blustery day with chilling wind, gray skies and an intermittent drizzle of rain. In the last several hours the drizzle had turned into a steady downpour. The eight wagons had been drawn up into a circle, and the mules and horses turned loose to graze. Most of the children were asleep in the wagons. Beneath the wagons some of the men and women were trying to sleep in wet bedrolls. Others were huddled around the campfire, staring into the flames, feeling the warmth penetrate their sodden clothes. Most were thinking, not of the cold or the rain, but of what tomorrow would bring. Then the wagon train would have to make a 1500-foot descent along the face of Hurricane Fault to Warner Valley below. The way

down the escarpment, called the Rock Canyon Dugway, is a steep series of switchbacks, by no stretch of the imagination would one consider it a road. It would be stretching things a bit to consider it a trail.

Morning came—a thick, damp, gray morning. There was work to be done. Breakfast was cooked, and the horses and mules were rounded up. The wheels of the lead wagon had to be retrieved from a pond where they had been soaking all night so that the wood would swell to tighten the wheel against the iron rims for the steep descent ahead. While this was being done, the clouds parted and the sun broke through.

All of this could have happened a century ago. Actually it was 1978. Organized by Melvin Heaton of Moccasin, Arizona, the four-day Pipe Spring Wagon Trek along the Honeymoon Trail is now an annual event. It provides an opportunity to experience what life was like on a wagon train crossing a portion of what was once known as the “State of Desert.”

The 1978 wagon train consisted of eight wagons, four mules, 25 horses and 45 men, women and children. The wagons carried barrels of cheese to be delivered to the Mormon Temple in St. George, Utah. Most of the participants were from Arizona, or Utah, although California, Colorado, Massachusetts and even Japan were represented. Ages ranged from a child of seven to a 79-year old veteran of the First World War.

One of the more remote regions of the contiguous United States, the Arizona strip is bounded on the north and west by Utah and Nevada, and on the east and south by the Colorado River and the Grand Canyon. Joe Bolander, who helped coordinate the first Annual Pipe Spring Wagon Trek in 1975, described the Strip as “... thousands of square miles of country nearly devoid of humans.” On the trek the wagon train crosses the Strip from Pipe Spring National Monument to the town of St. George, Utah. The trip takes four days.

Before the Temple of the

NOEL P. GRANZOW
Arizona State Office

Church of Jesus Christ of Latter Day Saints was built in Mesa, Arizona, Mormon pioneers living in Arizona had to travel to St. George, Utah, to be married. The trail they followed across the Strip became known as the Honeymoon Trail. After the Temple in Mesa was built fewer couples traveled the entire trail; however, a section between Pipe Spring and St. George remained in use for many more years. In the Pipe Valley, Mormon settlers kept their heads of "tithing" cattle. A tenth of the butter and cheese produced at the old stone fort at Pipe Spring was placed into barrels of flour and hauled by wagon to St. George. As the years passed more efficient means of transportation were developed, and a new road was constructed. The Honeymoon Trail was abandoned.

During the decades of disuse winter snows, spring rains and the encroaching vegetation almost obliterated all signs of the trail. Then Garth Colton, the Bureau of Land Management's District Manager for the Arizona Strip, initiated the research that led to the mapping and relocation of the trail along with appropriate trail markers along the way. The trail has since been nominated for inclusion in the National Register of Historic Places.

The 1978 Wagon Trek began on a clear, brisk Wednesday morning—September 13. Wagons were loaded, teams hitched and outriders were mounted. With a loud command from the wagonmaster, horses and mules strained in their traces and the wagons lurched forward. The four-day crossing was underway.

The train rolled west across Pipe Valley under a cloudless sky. As the morning progressed, the air grew warmer and dust hung heavy about the wagons. Riding point was the best position. The outriders fared almost as well, but whoever wound up riding drag was cloaked in a cloud of dust. The train moved at a steady rate of about 5 miles per hour. A man on foot would have been hard pressed to keep up. By noon the train reached Cedar Ridge, a high



A horse and rider check the descent of a wagon down the Rock Canyon Dugway as the train descended the face of Hurricane Fault.

point of land above Pipe Valley. As the horses and mules pulled the wagons up the slope, those riding in the wagons got out and walked to lessen the load. The train "nooned" at a watering hole. While the riders flexed stiffening muscles, animals were unharnessed and led to water.

After the meal, the teams were hitched, and the eight wagons started up the ridge toward Rock Point. The desert was carpeted with wild flowers and the air was growing warmer. Several homesteads, long abandoned, were passed that day. Far to the north, the travelers could see Vermillion Cliffs and Rock Point to the west. As the warm afternoon wore on, creaking wagons and laughing children made the only sounds in the great expanse of emptiness. Finally, near Rock Point, the wagonmaster called a halt. The wagons were pulled into a circle, and the animals were led to water. A campfire was built, dutch ovens greased and dinner was prepared for the hungry travelers.

In the evening, children—like children everywhere—scampered about, while the adults gathered in small groups by the wagons or around the campfire. The talk was of the day's events and stories of the past were told. Some wandered off alone into the desert to absorb the mood of the surroundings and enjoy the solitude. Darkness came and eventually the tired travelers rolled into their blankets and drifted into sleep. By midnight,

there was utter silence except for the soft sighing of the desert wind.

At two in the morning a light drizzle awakened those who were not in or under a wagon. The moon and stars—so brilliant at midnight—were obscured by a curtain of cloud. The drizzle ended as abruptly as it had started, and those awakened returned to a fitful slumber. By first light, the camp was stirring. It was a bleak dawn; a thin band of silver lined the eastern horizon, but the sky overhead was slate grey. Halfway through breakfast it started to rain again. Strangely enough, there was no sullen bickering among the children. Anticipation of another day on the trail kept their enthusiasm high. Camp broken, the train rolled out across the flats toward Lost Spring Mountain.

The wind started to blow by noon. The train was at Sand River Wash near a water hole when they stopped for lunch. After the animals were watered and the meal finished, the wagons moved out in a northerly direction. That afternoon the sky darkened, the wind picked up, and the Pine Valley Mountains to the north were hidden by low flying clouds. A fine drizzle dampened the earth, but not the spirits of the travelers. A benefit from the rain was that it held the dust down. The wagon train, alone in a vast empty land, rolled down the Antelope Valley to Rock Canyon, crossed the wash at the bottom



After the tradition of pioneer days, the wagons were "circled" at each campsite.

and straining animals hauled the wagons up the grade on the far side. After a short stop at the top of the grade to let the animals blow, the trek continued on toward the rim of Hurrican Flat to camp. That night it rained again.

When the clouds parted in the morning, the little band got its first view of the escarpment and the broad valley below. The trail down the steep slope looked treacherous. The "dugway" was built a hundred years ago by digging a roadway down the fault. Over the years portions of the trail had washed out. In these places stone cribbing had been used to repair and widen the trail. The travelers considered the possibility that the rains of the last fourteen hours may have loosened the cribbing. Also, there was no assurance that portions of the narrow trail had not washed out in some of the steeper sections. It would have been no trouble to negotiate the trail on horseback, but the wagons were another matter. Yet it had to be done; there was no other way down.

Those riding in the wagons got out and walked. The wagons were taken down one at a time, with a driver handling the reins and the brake followed by a man on horseback with a rope tied around the rear axle and the other end wrapped around the pommel of the saddle. The descent was slow; the horse behind, with muscles bunched

kept the rope taut as a bowstring to prevent the wagon from overrunning the horses in the traces. Whenever the brakes were locked inadvertently by the driver, the iron rims of the wagon wheels struck sparks as they slid over the slick rock surface of the trail.

In relays they came—each team picking its way down the steep trail. At a level area half way down the wagons regrouped for a breather. Then the cautious descent continued. At a point about three quarters of the way down, the dugway crossed a wash. Here the teams were given their heads for a short dash through soft sand in the hope that momentum would carry the wagons up the opposite bank and out onto solid rock. Seven wagons made it, one bogged down. Two teams were hitched to the stalled wagon, and with extreme effort the wagon was pulled up the embankment to join the others. The descent continued. Near the bottom the slope became more gradual, and finally the wagons rolled unscathed out onto the valley floor.

The train started the crossing of Warner Valley, but after a few miles a lunch stop was called. After an hour's rest the wagonmaster called for the start of the trip across the valley floor. Here the temperature was much warmer and the sun bore down relentlessly. Fortunately it was September and not July. By the

end of the afternoon, the train had reached the ruins of Fort Pierce.

The party made its third and final encampment near the ruins. As the meal was being prepared and the horses watered, the children saw a small band of Indians riding back and forth along the skyline. Soon they disappeared and a few minutes later they came riding into the camp. They were Pauites from a near-by reservation. They were invited to share the meal. Then, while the sun was setting behind the ruins of old Fort Pierce, the Indians repaid the hospitality they had received by performing some of the old tribal dances. Later they rode away under the light of a full moon.

Everyone was awake at dawn, and as soon as the chores were done the wagons moved out for their final day. It proved to be a long morning. The teams strained to pull the wagons through loose sand and across hardpan flats. As the wagons reached the crest of a hill at mid-morning, the party caught sight of the white tower of the Mormon Temple in St. George far in the distance. There was still several hours of travel ahead, even by horseback, but knowing that the end of the journey was in sight, everyone took heart. Soon they were passing plowed fields and farms. The trail followed the course of the Virgin River—named after Tom Virgin, one of the mountain men in a party led by Jed Smith that had crossed this way more than a hundred and fifty years ago.

At one thirty in the afternoon of the fourth day, the eight wagons pulled up in front of the one hundred and one year old Temple in St. George. The tithing cheese was delivered to the Temple President in a brief ceremony. Everyone then went to a local restaurant for lunch, before riding through the streets of St. George as a part of the annual Dixie Roundup Parade—a fitting end to an enjoyable and educational venture and an exciting four days on the Honeymoon Trail.

Old Survey Errors Create Real Estate Nightmares

IDAHO'S LOST LANDS

TRUDIE OLSON

Idaho Falls, Idaho District Office

In the Ordinance of 1785 Congress wisely decreed that no title to public land would be issued until the land had first been surveyed. Only after survey could boundaries be marked or accurately described in appropriate documents. This decision has probably saved untold millions in litigation and perhaps even bloodshed.

In 1812 the responsibility for public land surveys passed to the General Land Office. In addition, the General Land Office was responsible for the survey of boundaries between newly formed states. In 1946 responsibility for survey passed to the Bureau of Land Management, predecessor to the General Land Office. There it remains until this day.

As the Federal Government accepted the responsibility for surveying the public domain it soon recognized that much of the actual survey work would have to be done by private surveyors under contract to the Federal Government.

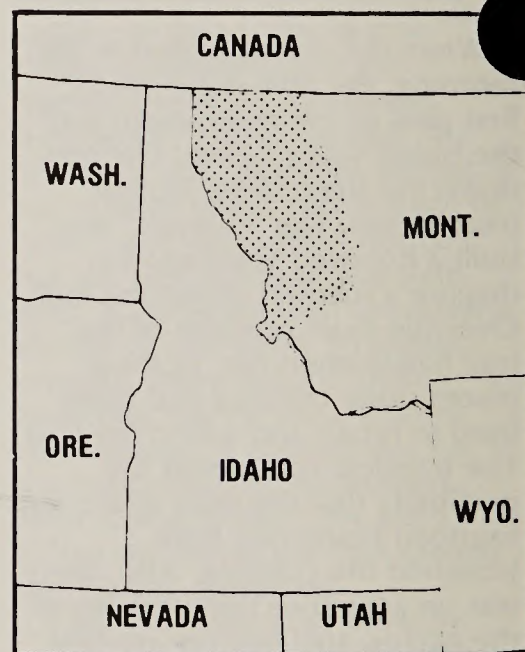
The contracting of survey work was routine during the years between 1796 and 1910. For the most part contract surveyors were honest and competent, but there were exceptions. The exceptions ranged from honest error to outright fraud. The State of Idaho has suffered adverse impacts from some of those early survey errors.

One notable error was made by a survey crew under contract to survey the line between the States of Idaho and Montana. Both States had agreed to accept the Continental Divide as the boundary, but in marking the line the crew "lost" the true divide, instead they followed a ridge that branched off to the West. As a result, a large area that should have been in Idaho ended up as a part of Montana.

A second error that has caused headaches for the Bureau's Idaho Falls District was made in the late 1800's and resulted in what BLM surveyors call "omitted lands." The Bureau's Division of Cadastral Survey has defined "omitted lands" as lands that were not included in an official survey through fraud or gross error on the part of the original surveyor. In this case, the omitted lands were the results of the surveyor's failure to follow established procedures in locating the meander of the Snake River.

In 1922 a General Land Office surveyor made a reconnaissance survey and identified the exact position of the Snake River. In the process he found a significant acreage of unsurveyed land between the original meander line and the existing river. This unsurveyed land has grown into a real estate nightmare.

Inquiries and disputes over



omitted lands mushroomed until it was necessary for BLM to make a comprehensive resurvey. The resurvey was made in 1957. It proved that the original meander line was sometimes more than a half mile from the true river channel. In other places it was 400 feet above the existing river channel.

According to law, all lands not included in a survey remain the property of the United States. It became necessary to determine the exact extent of these omitted

lands, and the new survey identified those lands between the original line and the "mean high water line of the water."

Lands in 28 townships have now been included in the resurvey. Some townships have as much as 2,000 acres of omitted lands within their boundaries. Overall, nearly 16,000 acres have been identified as omitted.

Under the present law, the Secretary of the Interior can sell omitted lands to persons able to establish a preference right by showing that they made developments on the land before January 1, 1975, but Congress also added the stipulation that the conveyance of such land to private owners had to be in the "public interest." It is this requirement that has often proven controversial and difficult to define.

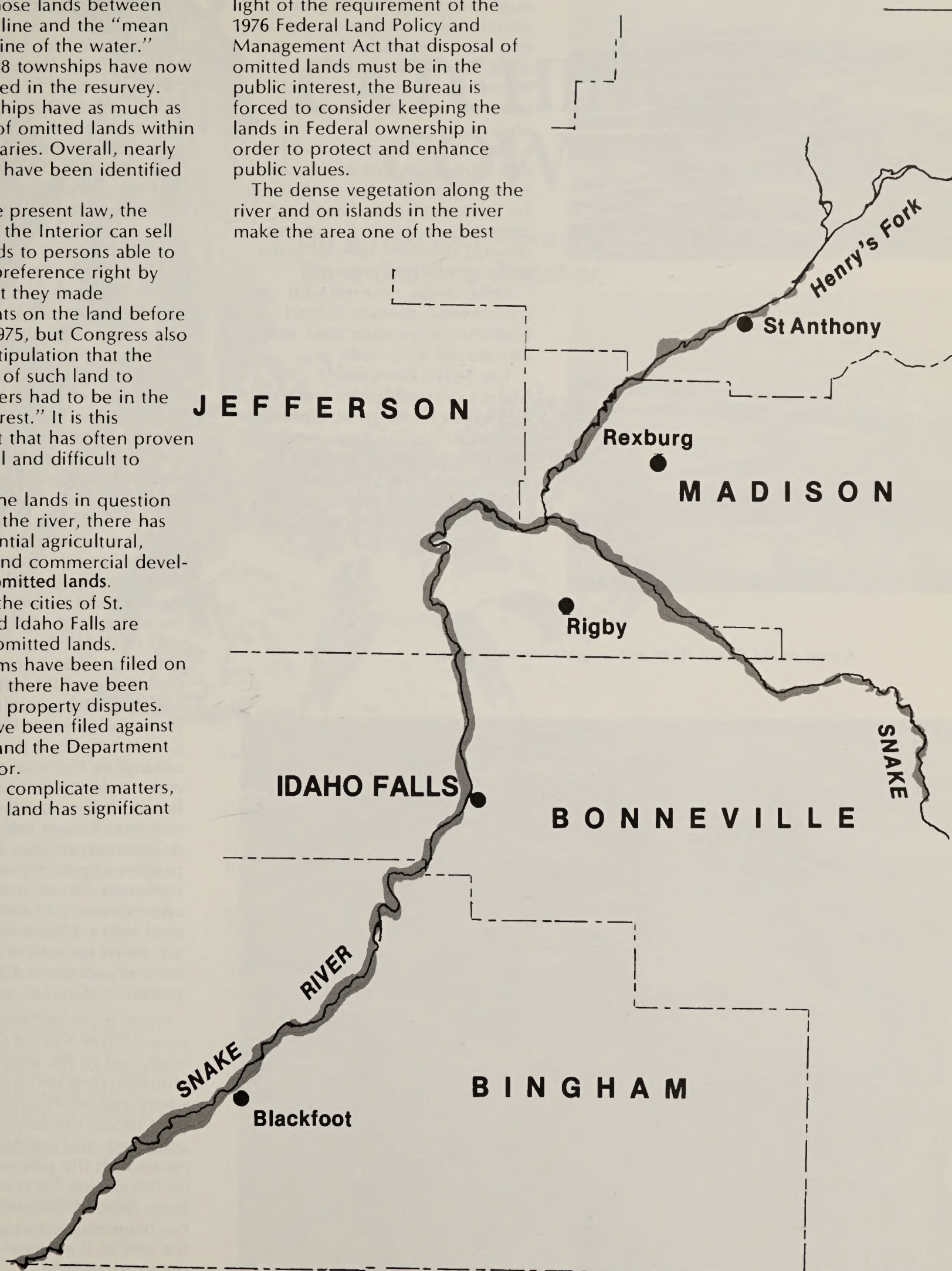
Because the lands in question are close to the river, there has been substantial agricultural, residential and commercial development of omitted lands. Portions of the cities of St. Anthony and Idaho Falls are located on omitted lands.

Many claims have been filed on the land and there have been some critical property disputes. Law suits have been filed against the Bureau and the Department of the Interior.

To further complicate matters, much of the land has significant

wildlife and recreational value. In light of the requirement of the 1976 Federal Land Policy and Management Act that disposal of omitted lands must be in the public interest, the Bureau is forced to consider keeping the lands in Federal ownership in order to protect and enhance public values.

The dense vegetation along the river and on islands in the river make the area one of the best





A view of the Snake River and adjacent omitted lands.



waterfowl habitats in the northwest. The abundance of waterfowl using the area has attracted duck and goose hunters into southwest Idaho from many areas. In addition to the waterfowl, there are ringneck pheasant in sparsely populated areas.

The Idaho Department of Fish and Game uses one of the islands on the upper reaches of the river for a massive goose-banding project each spring. Some areas provide excellent sites for other kinds of wildlife research.

Other areas, covered with cottonwood, provide habitat for both the native mule deer and introduced white-tails.

The Snake River is one of Idaho's prime fisheries and has more than 14 different species of fish, including rainbow, cutthroat and brown trout to provide a challenge to both the novice and the experienced angler. As the Snake River winds through the

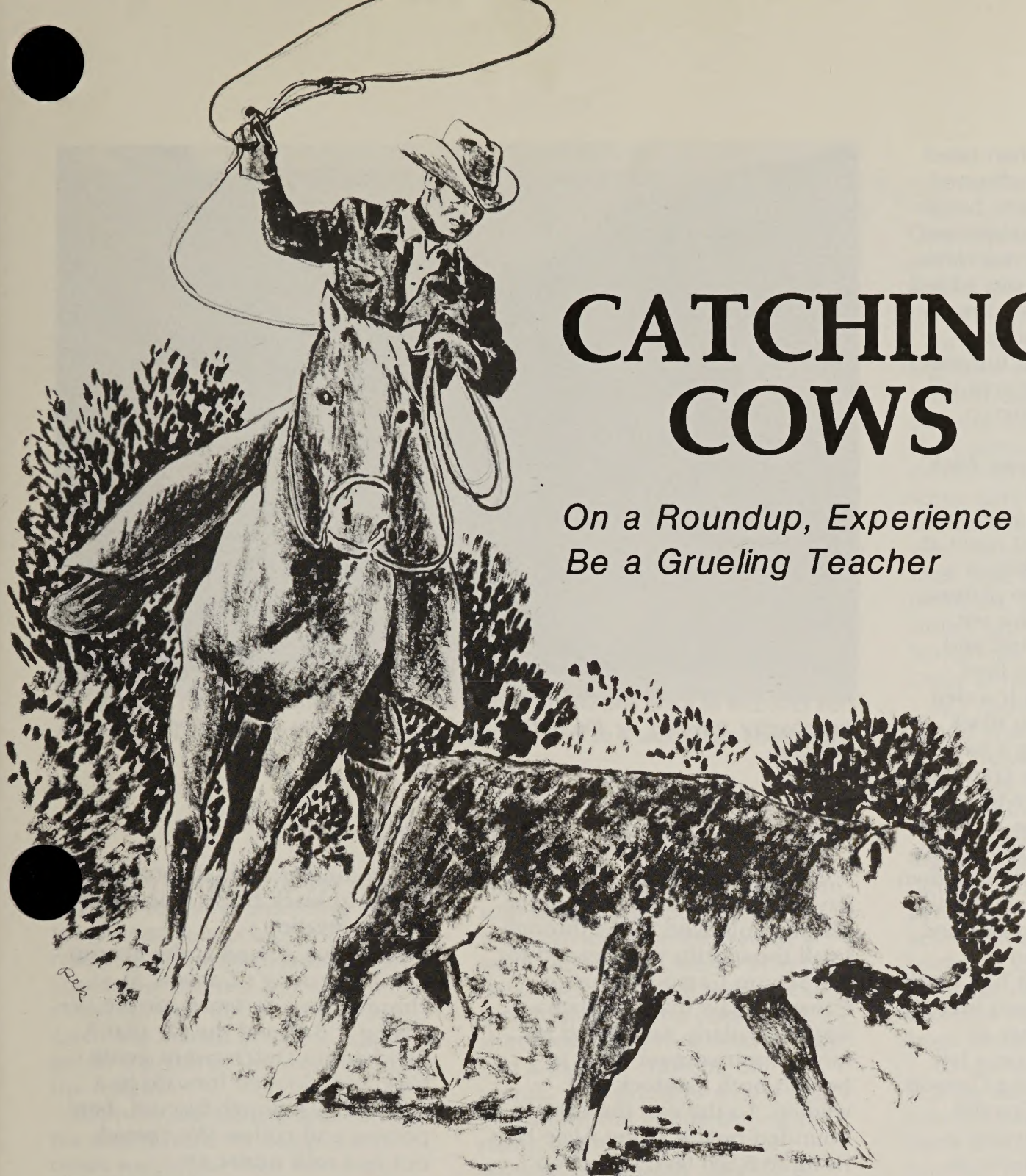
omitted lands, it is easily accessible from the major population centers of southwest Idaho and to heavy seasonal traffic headed for Yellowstone National Park. On a warm day you can find people from 8 to 80 enjoying the river. Few areas in Idaho are better suited for family outdoor recreation.

The omitted lands are the key that can unlock a vast potential for recreation while they also protect and preserve critical wildlife habitat.

Through the Recreation and Public Purposes Act, several cities, counties and non-profit organizations have been able to lease or purchase omitted lands for public recreation. Developments include the Blackfoot Municipal Park and Golf Course, Idaho Fall's Freeman Park, and the Intermountain Science and Experience Center. Several counties have developed small parks and boat launching facilities at key access points along the river; other sites are being studied for future development.

Determining which omitted lands should be kept in Federal ownership and which should be sold to private interest has been a complicated and time-consuming problem over the last 15 years. Several realty specialists at the Idaho Falls District Office have devoted much of their time to untangling the legal maze and making determinations. To date decisions have been made on a number of cases and a proposed decision on another is in the process of public review and comment. These decisions affect approximately 13,400 acres. Of this total about 5,100 acres have been identified for sale to private owners and about 8,300 acres for retention in public ownership.

While these decisions represent a giant stride toward the resolution of the long standing problem, they do not provide the whole answer. Portions of the most recent decisions are being contested, and reaching agreements with the private claimants on the criteria for conveyance has been difficult. However, progress has been made, and yonder, at the end of the tunnel, there seems to be light.



CATCHING COWS

On a Roundup, Experience Can Be a Grueling Teacher

My horse caught a flash of red through the pinions and, with a quick rush, leaped through the crotch of a juniper after an old red and white maverick cow. He had been trained for roping and didn't understand that I only wanted to take pictures while BLM and cattle company hands gathered cattle from Dark Canyon Plateau in southwest Utah.

As soon as he cleared the juniper, the horse put me alongside the cow. He waited for me to throw the rope. He persisted. Finally I succeeded. The

horse applied the brakes, and the cow came down in a heap. A real cowhand appeared and haltered her.

This adventure in wild, broken country started in early spring, 1958. A few months before, I had arrived in Monticello, Utah as district manager and was still getting acquainted with the country. The maverick chase was part of a joint program between The Scrup-Sommerville Cattle Company and BLM to improve range conditions. BLM and the company had some excellent brush chaining and reseeding projects started on the Plateau. BLM had also built some fence and developed a spring. In order to get the cattle off the area during the time the newly seeded grass was starting to grow, the

company had agreed to gather all mavericks on the plateau before they put more cows on the area. Mavericks have a habit of reverting to the wild and converting other cattle to the free life.

Most of the mavericks on the plateau were offspring of a few cattle that had survived the devastating winter of 1948-49. We chose March for the gather because cattle could still be tracked through the snow and had not recovered strength from the winter. Still, only 35 cattle had been captured on a similar try the previous March.

When my horse would let me, I stayed out of the action and watched the activity. The trail leading to the plateau had been one of the most scenic trails I had

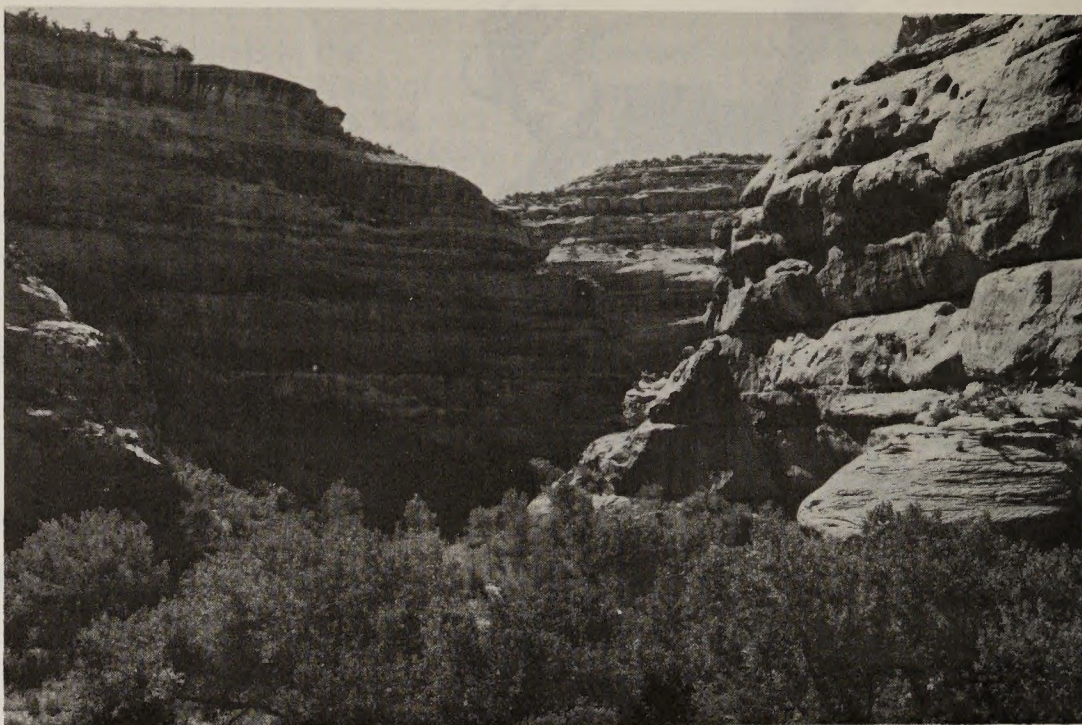
KEITH NORRIS

New Mexico State Office

ever ridden. Each mile had been different. Erosion had fashioned the sandstone into towers, buttes and spires. Little imagination was needed to change the rocks into familiar objects. When you added this to the extreme quiet, the ruins of 800-year old Indian dwellings, granaries and fortresses, it is no wonder that the area is now a part of Canyonlands National Park.

Another BLM employee, Nick Cozakos, and I had left Monticello with four horses and gear. We stayed the first night at Squaw Cave and then began a two-day pack trip to the plateau. After leaving Squaw Cave we crossed over Elephant Hill and through Devil Lane into Beef Basin. The next day we traveled on to Bobbie's Hole, up Black Canyon and then along a narrow trail through the Horse Trap into Fable Valley, from there to Young's Canyon and on to the Dark Canyon Plateau. The Devil's Lane reminded me of riding down a wide street between solid walls. Apparently, the rock formations had been tipped and an intervening layer of salt had partly washed away or collapsed leaving the "street." I remember an interesting pictograph on a tall sandstone spire in Young Canyon. It depicts a helmeted Spanish rider on horseback carrying a lance. Beef Basin had been so named because of its ability to feed a large number of livestock for the two or three months prior to being trailed to a railhead for shipment. In 1958 it was in poor condition. Deer and livestock had overused the area.

Except for lunch stops, we rode as long as possible each day. Since it was early spring, the daylight hours were short. Our first night out, one of the horses broke its hobbles and started back down the trail. The three hobbled horses worked hard to join him, and Nick spent some time before breakfast catching all four. We had a hurried breakfast, broke camp, packed two horses and continued our trip through the Basin and on to the Dark Canyon Plateau.



This juncture of Kane and Grand Gulch, southwest of Blanding, Utah is typical of the country traveled by the author and his companion in reaching the cattle roundup.

On the evening of the second day, we arrived at the top of the plateau, followed tracks through small snow drifts and headed for the Scorup Camp in Young's Canyon. I saw that the plateau was particularly well suited for range improvement work to benefit both livestock and wildlife. To the east the canyon is bounded by the Sweet Alice Hills rising to 8,500 feet. The deep Wooden Shoe and Dark Canyons are to the south, the Colorado River to the west, and the Fable Valley and Gypsum Canyons to the north. Vegetation ranges from

pinon-juniper and sagebrush stands to black brush types at the lower elevation.

When we arrived at the Scorup Camp in Young's Canyon, Si Thornell, cow foreman for the -V- (Flying V Bar) and the -X- (Bar X Bar) had his Dutch ovens going. Nick and I looked forward to a meal of sour dough biscuits, beef, potatoes and coffee. We spread our bed rolls under an overhanging ledge, which offered some protection from the chill March night.

Next day it was a Scorup horse that taught me to rope mavericks.



Nick Cozakos tends the horses at an unnamed spring during the trek to Dark Canyon Plateau.



A team of BLM experts ride deep into rugged country to check range conditions.

The cattle company horses were adapted to the country and toughened to work. Si and his riders all knew the country. They could spot the red and white cows, take off in hot pursuit and catch the animal before it could get to the rim of the mesa or near the ledges.

Each day, as evening approached, we would head for camp. Two riders would use their horse and lariats to drag in enough wood for the night.

While waiting for the fire to burn down to a bed of coals, we would participate in Si's Happy

Hour. His Happy Hour cache, the sour dough jug and Dutch oven were carried over the trail by a small sure-footed mule named Ikey. Si claimed that Ikey was so sure-footed that he could walk a stretched cable, if necessary. Ikey had a habit of crawling out of corrals. The wrangler would hear him and shout at him during the night, but he would get out anyway. Fortunately Ikey liked company and would stay close to camp.

Si Thornell, a nephew of Al Scorup, was a young man when he went to work for the company.



A mesa in the Canyonland Country. It was from such an area that the cows were gathered.

Cowboys came and went, Si stayed on. During the evenings Si would talk about the building of the Scorup empire.

In 1890, when Al Scorup was eighteen years old, he and his brother came to the canyon lands country from the west. They left their settled Mormon home in central Utah with a few quilts, some pots and pans and cattle to run on shares. Texas cattlemen were already in the area and did their best to discourage the intrusion. Despite harassment and stolen cattle, the Scorups stayed. Sometimes they regathered their cattle at night.

Al's brother died just after World War I, but Al lived until 1959. He was honored posthumously with election to the National Cowboy Hall of Fame.

Eventually the company holdings included several large ranches. Forest Service and BLM permits totaled over 1¼ million acres, but about 2/3 of the company's winter range on public land was not usable because it was slick rock, too steep or too far from water, Si told us.

To operate successfully, the Scorup-Sommerville Cattle Company needed dedicated and conscientious cowboys. They had to move cattle continually in small bunches to use pockets of feed and take advantage of storms that left pools of water in the depressions in the slick rock.

Nick and I participated in the gathering for three days. Our crew gathered 23 head of cattle. We had to leave, but the Scorups would continue and eventually 130 wild cattle were gathered and removed from the plateau over a three year period.

We returned by the same route to Squaw Cave. I had had an experience shared by few people today, broken no bones, learned from cowhands and cow horses, shared campfires and stories, and been awed by the scenery I had once known only as notes in BLM files. As we stood in the cave by our fire after supper, the snow started to fall. It was a pretty good spot to be if you couldn't be at home.

The Death and Resurrection of a Sauropod Dinosaur

Bones From 140 Million Years Found on BLM Land



Near the end of the Jurassic era in the gray dawn of a morning now lost in time, a group of sauropod dinosaurs were feeding along the course of a mighty river. For the most part, the flood plain of the river was covered with low growing vegetation, but close along the stream, the savanna was broken by a dense growth of trees and other high growing foliage.

It was this foliage that commanded the attention of the sauropods, for if our present concept about dinosaurs is correct (and concepts are constantly changing) the sauropods were herd animals whose long snake-like necks enabled them to feed on high-growing foliage much in the fashion of modern-day giraffes.

As the herd moved along the bank of the stream, individuals kept close together as a protection against the smaller flesh-eating dinosaurs that hovered wolflike along the flanks of the herd. In a one to one confrontation the larger sauropods were more than a match for the smaller flesh-eaters, but in packs the flesh-eaters could surround a lone sauropod and dart in with slashing attacks until the larger animal was brought to the ground. The trick, of course, was to cut out a single individual from the herd. The flesh-eaters had survived for millions of years

because they had become skilled in sensing every opportunity to isolate a single animal that happened to stray from the group or lag behind. On the other hand, the sauropods had survived because they had developed a strong herd instinct. Throughout the centuries the two species had waged a constant battle of wits and struck a balance that had enabled both to live together in a place and through a period of time.

On that particular morning, the herd moved through the foliage that grew along the river in a compact group that gave the flesh-eaters no opportunity to attack until a single animal feeding on tender shoots hesitated a moment too long to follow the rest of the herd. Once the herd had moved a few yards downriver the flesh-eaters moved in to cut the laggard off from the main body of the herd. Once they had established their positions, they waited patiently for the lone sauropod to sense its isolation and panic.

Mercy is not one of Nature's virtues, and the attack that followed was prolonged and brutal. It was not until late afternoon that the flesh-eaters were able to bring the great sauropod to the ground.

Since the beginning of recorded history, men have seen the earth pretty much as we see it today. But beyond history, there is a vast void that the human mind can measure, but cannot fully comprehend. Within that void, continents have been torn apart, mountain ranges have been thrust to spectacular heights and then worn down, and the face of the earth has been altered many times.

What happened beside that river happened slowly. So slowly that generations of men—had there been men at that time—could have spent their collective lifetimes without being aware that anything was changing. Nevertheless, change was constant, and eventually it made the world as we know it today.

There on the river where the dinosaur had died, the flesh was soon stripped from the bones, first by the flesh-eaters and later by scavengers drawn to the spot. A few weeks later the river flooded. The rushing current tore the leg bones from the skeleton and washed them further downstream. The rest of the bones were covered with a layer of silt. Successive floods brought more silt, and eventually the bones were buried under tons of earth, sand and debris. As the layers accumulated the ground rose up until the river itself was pushed away and cut a new channel.

Another slow process was taking place within the mass of the bones. Water, bearing mineral matter in solution, seeped into the bone tissue and the mineral matter started to replace the organic matter in great detail. Eventually the mineral matter produced an exact replica of the living structures and the bone became wholly fossilized.

There were also great changes on the continents and in the climate of the earth. Tremendous pressures raised the level of the floodplain high about the level of the sea and changing climate turned swamps into deserts.

From the day the dinosaur died beside the river, something like 139 million years passed before the first men appeared on earth, and we believe that another 900,000 years passed before the first men found their way to the North American continent. Those first men found much of the continent covered by a great ice sheet. We know little about those early settlers, how they lived or their patterns of migration, but some of them eventually settled in the area where the dinosaur had lived and died. Here the ice sheet had not penetrated, but its effects on the climate made the area much more hospitable for primitive people than it would be today.

The first people in the area were primitive farmers and hunters, but in time they developed city communities built of stone and adobe brick. Because



Volunteers assist in the excavation of the dinosaur bones.

many of these communities were situated along easily defended cliffs, we call them cliff-dwellers. Other Indians called them Anasazi—the Ancient Ones. What they called themselves, we do not know.

As the ice cap retreated north, the climate of the southwest changed. Drought drove the cliff dwellers from the land, and the cities they had built became empty hulls and the land turned into desert.

Two hundred years ago a new nation was established on the Atlantic Coast, and three quarters of a century later that nation had established settlements on the Pacific Coast. In the years that followed much of the land in the vicinity of the dinosaur's grave was claimed by settlers, but the very spot remained unclaimed—remaining a part of the public domain administered by the Bureau of Land Management.

About 15 years ago a rockhouser named Bill Johnstone from Albuquerque, New Mexico was out looking for interesting mineral specimens. He came on an exposed portion of one of the dinosaur's bones. For the first time in 140 million years, a living creature recognized the fossil for what it was.

Fearing that someone might destroy the specimen, Johnstone kept the location secret until 1978 when he came into contact with Dr. Keith Rigby, a BLM

palentologist. Recognizing that Dr. Rigby was in a position to protect the integrity of the fossil, Johnstone told him about the skeleton. Dr. Rigby made an investigation.

Recently BLM started to excavate the bones and quickly realized that it had most of a sauropod skeleton. As the excavation proceeded, Dr. Rigby recognized that the skeleton was of museum quality. It shows that the living animal was approximately 60 feet in length and was a four legged creature that fed on vegetation.

In the careful process of excavation, Dr. Rigby was assisted by volunteers from several organizations and from the University of New Mexico. As the bones are removed from the matrix that has protected them for millions of years, they were stored until a suitable place can be found for them to be exhibited.

Significantly the excavation team found the tooth of a flesh-eating dinosaur in the same area. There is no evidence to connect the two creatures except the location. But the tooth does indicate that predatory dinosaurs did live in the same area, and, in a sense, justified the wholly imaginary plot we used to introduce the story. To Dr. Rigby it also suggests that careful excavation may turn up the remains of other dinosaurs from the same area.

Landmarks of a Past Not Yet Forgotten IV

THE HARN HOMESTEAD

EVALINE OLSON

Colorado State Office

The year was 1910. Citizens of Guthrie and Oklahoma City agonized in the white heat of political, legal and financial battle.

Citizens of Guthrie didn't want to lose the State Capitol to Oklahoma City. But Guthrie didn't have William Fremont Harn and J. J. Culbertson. Oklahoma City did. Both men were interested enough in the growth of Oklahoma City to put up 40 acres each of their precious homestead land to insure that the City would become the capitol of the State. Harn wanted

the State of Oklahoma to use the land as the site of a new Capitol building. Today the Capitol still stands on that land. As an added bonus, the Capitol grounds have pumping oil wells.

The Oklahoma Territory first opened a part of its land for settlement on April 22, 1889. Shortly after the land run, William Harn, a young man from Ohio, was sent to the Territory as a special agent of the General Land Office. His job was to help the United States Attorney prosecute

persons who had illegally obtained homesteads in what was then Indian Territory.

Before long, 150 land jumpers and Sooners (those who went onto the land before it was legally open) were indicted. About two thirds of the defendants were convicted and their land was reclaimed by the Government and sold.

By 1891 Harn had finished his duties. Deciding to stay on in Oklahoma, he resigned his position with the General Land



The Harn Homestead, Oklahoma City, Oklahoma, now on the National Register of Historic Places.



The barn at the Harn Homestead in the process of restoration. The skeleton for the windmill can be seen protruding through the roof.

Office and bought a 160 acre homestead reclaimed from a miner. He moved onto the land, tamed it, and built a house that has become a model of pioneer skills and tastes.

After four years of work by the late George Shirk of the Oklahoma Historical Society, the Harn homestead has been placed on the National Register of Historic Places. The 89ers Society, an organization made up of 450 families whose ancestors were in the land run of 1889, has gained recognition as a historical society and received some Federal funding for restoration of the Harn house. The taxpayers of Oklahoma City are financing much of the project until the 89ers can raise an anticipated \$1 million for a trust fund whose interest will provide money to operate the homestead.

In a special ceremony held on April 22, 1978, the Harn homestead was temporarily opened to the public. The opening was signaled by the shot of a pistol commemorating the original land run that had been officially started exactly 89 years before.

The 89ers are furnishing the house. Articles must date from 1908, the year that Oklahoma became a state, before they will

be accepted. Whenever possible, articles dating back to 1889 are preferred.

A link to the past was forged by memories of those donors who have seen their donations in use. One woman donated an old wood stove she could remember her mother using to can, render lard, cook meals for 18 to 20 threshers, bake bread and heat the wash boiler.

Another donor, whose great grandfather made the run on the Santa Fe train, donated a kitchen cabinet.

"My grandmother used this cabinet," she recalls. "She was only four feet eleven, so she had the legs cut off to bring the counter down to her level."

The Sears catalog of 1901 shows a similar flat-topped wooden cabinet with rounded flour bins and a pull-out cutting board.

Designed by a Kansas City architect, the Harn house features extra windows for light and air made possible by the beveled corners in the front rooms. The house has polished hardwood floors and wooden moldings around the ceiling. An impressive wooden staircase leads to the three upstairs bedrooms, one of which boasts a massive 200-year old canopied bed assembled with wooden pegs. There is also an

upstairs bath with running water.

The water comes from a storage tank located high in the peak of a nearby barn. It flows by gravity through an underground pipe to a storage tank in the attic of the house. One had only to turn on a faucet to get running water in the bath.

The barn was built of lumber and local red sandstone. Water was pumped by a windmill poking up through the barn roof. In addition to pumping water for the bath, the windmill also pumped water for the livestock. Winter cold was no problem since the body heat of the animals kept the barn warm and the water from freezing.

In the typical heat and humidity of Oklahoma City in late summer, I traversed busy freeways in the air conditioned comfort of my car. Driving past pumping oil wells on the grounds off the State Capitol I finally found an obscure little lane that led me to the Harn house and into the past.

The pleasant white frame house stands symbolic of a time when an energetic generation of men transformed an untamed prairie to fit the needs of empire. Today it waits in a niche of time unaffected by the currents of change that have brought Oklahoma into our modern age.

LEE KEESLING

Casper, Wyoming District Office

WYOMING DISCOVERS

GOLDENEYE

BLM Solves Recreation Problem



A Goldeneye success story.

"I've fished in Wyoming and Colorado for 20 years, and this is the best trout fishing I've ever seen. I'll be back tomorrow."

"It's a great place to get my kids interested in fishing. My 10-year old daughter caught two 16-inch rainbow today."

"Even when the fish aren't biting, I enjoy just relaxing and watching the bird life."

These are typical of the comments from those who use the Bureau of Land Management's Goldeneye Wildlife and Recreation Area 22 miles northwest of Casper, Wyoming.

The area consists of the 500-acre reservoir built by the Burlington Northern Railroad; 120 acres of State Land under lease to Burlington Northern; 460 acres of BLM lands; and 75 acres of private land under public use easements.

It was opened in 1973 following a land exchange to provide public lands around the reservoir and a cooperative agreement between BLM and Wyoming Game and Fish Department for the Department to stock the reservoir. Another agreement was reached with Burlington Northern, who owns the water rights, to allow the reservoir to be used for recreation.

The area is managed by BLM's Casper District. It now has an estimated 60,000 visits annually and is one of the most intensively used BLM recreation areas in Wyoming.

The outstanding trout fishing provided by the reservoir accounts for Goldeneye's popularity. Seventy-five fishermen out of every hundred catch trout. The average fish weighs 1 3/4 pounds and measures 16 inches. The reservoir is stocked periodically by the Wyoming Game and Fish Department with rainbow trout

fingerlings. It supports a large population of a small crustacean, commonly called scuds. These are a primary source of food for trout. Rainbows grow at an average rate of one inch per month in Goldeneye.

Two or three years ago, visitor comments more commonly reflected some of the Bureau's serious problems at Goldeneye.

"People are tearing up the land and disturbing nesting waterfowl by driving their vehicles everywhere. Can't something be done to stop this?"

"My canoe was capsized by a passing speedboat. Somebody is going to get killed out there."

"People let their dogs chase ducks off their nests."

"People are target shooting along the shoreline with high-powered rifles. I'm afraid to go

back to Goldeneye."

The problems the Bureau encountered at Goldeneye may be indicative of what can happen with other public land recreation resources. A long history of uncontrolled recreational use had given the public the idea that recreational use of the public land is unlimited and unregulated. In part the concept was true. BLM had no enforcement authority until the Federal Land Policy and Management Act was passed in 1976. Although this Act provides enforcement authority, the Bureau will not be able to provide complete coverage over the vast lands it administers.

The increasing recreational use of the public lands adds another dimension to the problem. As the population of the West continues to grow, and more people learn about the recreational opportunities on the public lands, use of these lands will increase. Many areas of public land lie near urban

centers and provide important week-end recreation for local people. This is particularly true since the high cost of transportation has curtailed travel in recent years. Some areas already draw regional and national interest and provide an alternative to overcrowded National Parks and National Forests.

All of these factors must be considered if BLM is to provide quality recreation opportunities and also protect public land resources. The Bureau must plan for the inevitable increase in recreation and overcome the "free-unregulated-unlimited" image associated with public lands.

What has happened at Goldeneye shows that these factors can be countered and the problems can be overcome.

Despite trout stocking efforts by the Wyoming Game and Fish Department, fishing was poor during 1973 and 1974. The reservoir averaged less than five visits a day. Then in early 1975 the Department conducted gill net sampling and found that the growth rate of the fish had been phenomenal over the winter. Soon reports of 16-18 inch trout became common and the news

spread quickly. By the end of June use of the reservoir had jumped to an average of 78 visits per day. There were 300 visitors on many weekends.

As the number of visitors increased, so did the problems. New trails and ruts developed and waterfowl habitat was disturbed as visitors drove indiscriminately along the shore and into shallow portions of the reservoir. Public safety became a major concern when some fishermen started to bring 15 to 16 foot runabouts with up to 100-horse power engines to the reservoir. Since most fishermen used canoes or other small boats, reports of the swamping of small craft became common.

The large boats caused other problems. A gravel boat ramp has originally been installed, designed to limit the size of boats and to protect small boat users. Those with the large boats found it difficult to launch their boats from this launch ramp. Some tried to launch at other sites causing bank damage and unsightly ruts. Difficulty in launching large boats at the ramp caused bottle-necks and long waiting times for the small boat owners. Sometimes tempers

flared; arguments and even fights broke out.

As use increased, vandalism and littering also caused a problem. When snow drifts blocked the main road, visitors cut through a fence to get to the reservoir. Signs were used for target practice and there were reports of dogs harassing waterfowl and livestock.

BLM received complaints from personal visits to the District Office, from telephones and letters.

"Why doesn't BLM arrest or fine people who swamp canoes with their speedboats or when they drive through duck nesting areas?"

"Why don't you close the area to motor vehicles? People who are really interested in quality fishing should be willing to walk the mile from the highway. Troublemakers wouldn't bother."

"If BLM can't control these problems, then you should transfer management of Goldeneye to somebody who can."

The problems and suggested solutions were discussed at a meeting of the Wyoming State Advisory Board in the Spring of 1976. To get information and get



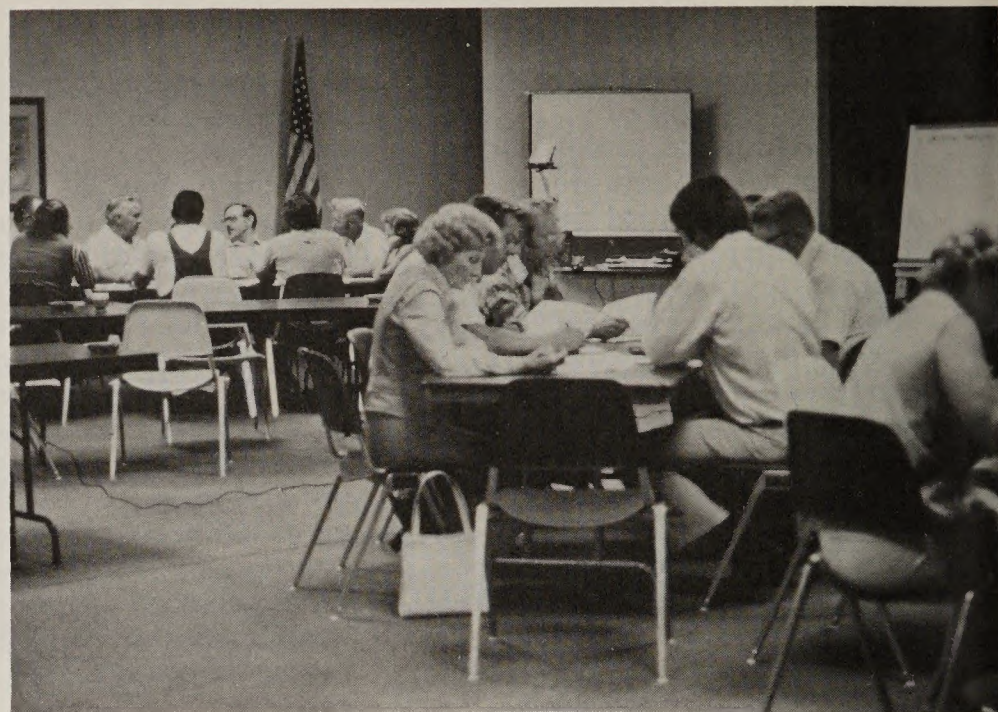
Fishermen from a wide area come to sample the trout fishing offered by the reservoir.



Motorboat being launched into reservoir. The conflict between Motorboat users and those using canoes and other man-powered craft created one of the problems at Goldeneye.



Sign marks the temporary closing of the Goldeneye reservoir so that BLM and cooperating agencies could prepare regulations to ensure proper use of the area.



A workshop made up of BLM planners, cooperative agencies and the user public developed regulations for the use of the area.

recommendations, the Casper District held special meetings with 11 local interest and user groups. Special meetings were held with all parties to the cooperative agreement.

From these meetings came three important conclusions: (1) immediate action was needed to reduce the problems, particularly with off road vehicle damage which was increasing as melting snows left mud in the road and about the reservoir; (2) rules to regulate visitor use were needed; and (3) those rules had to be enforced.

In mid-March of 1976 the District closed the reservoir to all motorized vehicles for 2 months to avoid damage expected during the wet spring. Actions were taken to improve conditions before the area was reopened. Portions of the main access road were improved. Signs regulating vehicle use were erected and physical barriers were installed where necessary. The district developed a set of rules in cooperation with the local people and user groups. All groups were asked to help assure compliance through peer pressure brought to bear on violators. News releases

and radio and TV messages explained the problems and appealed for compliance with the regulations.

On May 22, 1976 Goldeneye was reopened on a trial basis under special management conditions. They included the newly established regulations, a limit on the number of vehicles allowed into the area at any given time; and a limit on access to one road. BLM retained the option to close the area if the conditions were not met.

The trial opening was a success. Use of the area continued to increase, but damage was significantly reduced. There were isolated violations of the regulations, but most visitors were cooperative once the purpose of the regulations were explained by district personnel.

The public response to the new regulations led to an unexpected grant of \$50,000 from the U. S. Congress in the summer of 1976. These funds were used for needed maintenance work on the access road, parking and boat launching areas and inlet structures about the Goldeneye Dam.

The measures developed for the

trial opening of Goldeneye have recently been incorporated in a comprehensive recreation management plan. The plan includes measures for wildlife, range, and mineral development as well as recreation. It enables the district to identify future problems and to prevent them from becoming acute.

Goldeneye is a small area, but it is representative of the recreational opportunities BLM has to offer; it is a good example of the user impacts that can be expected on other areas and the need for careful planning to identify and reduce those impacts.

In the years to follow, many areas in other BLM districts will undoubtedly experience dramatic increases in recreational use. The planning effort needed to prepare for the impacts will be substantial in terms of time and money. Intensive public participation and cooperation will be essential. But if the final result is to protect the basic resource value and enhance the quality of the recreation experience, it will be well worth the cost.

They Painted The West III

KARL BODMER

-Artist for Hire

PAUL HERNDON
Washington Office

By 1830 that vast emptiness west of the Mississippi-Missouri Rivers System had captured the imagination of civilized men all over the world. A fascination for the unknown is universal, and only an infinitesimal part of the west had been explored.

Nevertheless, literature about the west was abundant. It would seem that every man who set foot across the Missouri hurried home to write about his adventure, while those who stayed home, wrote accounts based on the stories told by those who had been, or who claimed to have been, there. The reliability of the information that was available was questionable, but the appeal of the subject matter was undeniable.

Literature about the American west had also appeared in Europe, and the lure of the west was as great on that continent as it was along the eastern seaboard of the United States. As a result, many Europeans set out to make their own personal exploration. Such a trip was expensive, and those Europeans who came to tour the west were, of necessity, men of substance — many were members of the aristocracy. Among those who came was the German Prince, Alexander Phillip Maximilian.

Like other western travelers, Maximilian intended to write a book based on his observations and wanted a visual record of the things he encountered. In a later day he would have hurried out to buy a camera, but since that instrument had not yet been in-

vented, he hired an artist.

He was fortunate to get a man of exceptional high caliber — his name was Karl Bodmer.

Bodmer and Maximilian made a single trip up the Missouri River in 1833 — one year after George Catlin made the same trip. On this journey, which extended into the following year, Bodmer painted portraits of some of the same Indians who had posed for Catlin.

Bodmer was born in Switzerland in 1809. As a boy he worked as painter and engraver for his uncle. He signed the contract with Prince Maximilian on the spring of 1832. He was hired to prepare paintings

to illustrate the Prince's intended book.

The two men arrived in the United States in May 1832, but did not immediately start for the west. Instead they spent time in the east getting a proper background for their expedition.

They visited the Peale Museum in Philadelphia and talked to Titian Peale. While there, they studied the paintings of Samuel Seymour and the artifacts collected by Lewis and Clark and on the Long expedition.

The Prince bought some paintings by Peter Rindesbacher, and then journeyed to St. Louis to

Bodmer painted this picture of himself—far right—and his patron Maximilian—third from right—meeting Indians at a trading post on the Missouri River. Used by permission of the Smithsonian Institution.





Interior of a Mandan Indian Earth Lodge. Painted by Bodmer in 1833. The artist persuaded the Indian family to delay a planned move to winter quarters until he had

finished the painting. Used by permission of the Smithsonian Institution.

discuss their plans with William Clark and the Indian Agent Benjamin O'Fallon. While at O'Fallon's home they examined some of the paintings of George Catlin's, but as far as we know, they did not meet Catlin.

Clark had been generous with his help to Catlin, and now was equally generous with advice to the Prince and Bodmer. He arranged for Bodmer to paint portraits of members of a delegation of Sauk and Fox Indians who were visiting St. Louis at the time.

Like Catlin, Bodmer and Maximilian booked passage on the American Fur Company's steamboat, "The Yellowstone."

As the boat made its slow way up the Missouri, Bodmer took advantage of frequent stopovers to paint portraits of Indians from the Sioux and other tribes. While Bodmer painted, the Prince took notes in preparation for writing his book.

At Fort Pierre (near present day Pierre, South Dakota.) they abandoned the Yellowstone, and when time came for them to continue their journey they boarded another steamboat, "the Assiniboine." On June 18 they reached Fort Clark. Like Catlin, Bodmer spent his time painting portraits of members of

the Mandan tribe, and of scenes around the village.

On June 23 they arrived at Fort Union. The previous year Catlin had turned back from this point, but now Maximilian decided that they would travel even further up the river. While Maximilian made the arrangements, Bodmer painted scenes of the fort and of the Indians encamped around it.

There was no steamboat that traveled beyond Fort Union. Maximilian had to arrange for passage on the American Fur Company's keelboat, the "Flora." As they traveled Maximilian made comparisons between his own observations and the notes made by Lewis and Clark that he carried. After entering the rough terrain upstream from the Milk River, Bodmer painted a number of landscapes.

They ended their journey when they came to Fort Mackenzie just beyond the mouth of the Maria River. This was Blackfoot country, and the mere existence of a trading post on the spot represented an outstanding achievement in diplomacy.

It was on the Miria River that Lewis had his only hostile encounter with Indians. In a pitched battle that erupted from that en-

counter a number of Blackfoot warriors had been killed. Afterward the tribe exacted a terrible vengeance. For many years any trapper who entered the country was in grave danger of losing his life, but the hostility of the Blackfoot was not confined to whites. A Blackfoot warrior was the enemy of any man not of his own tribe, and they were hated and feared by all the tribes.

Yet even the fierce Blackfoot eventually succumbed to the lure of the white man's trade goods, and Fort McKenzie stood as a symbol of victory for the gods of commerce. But more important for the sake of art, the fort gave Bodmer and Maximilian the opportunity to study and paint these proud warriors while they still retained much of their primitive culture. Catlin had painted portraits of visiting Blackfoot warriors at Fort Union the year before, but Bodmer was the first to paint them on their home ground.

One of the warriors who posed for Bodmer was named Wolf Child. Some believe that he was the same person as Wolf Calf who had been a member of the party encountered by Lewis and Clark.

If Bodmer and Maximilian

needed proof of the Indian's warlike nature, they got a dramatic demonstration on the morning of August 28 when both were awakened by the sound of guns firing just beyond the wall of the stockade. Rushing to the parapet, they were in time to see a pitched battle being waged between the Blackfoot and a raiding party made up of some 600 Assiniboinés and Crees.

The attack centered around a small segment of the Blackfoot camp somewhat isolated from the tribes main encampment. There on the previous night a group of warriors had gone on a drinking spree that had lasted for most of the night. Near daybreak the warriors had settled down to sleep off a monstrous hangover.

As a rule all tribes considered a trading post as neutral ground, and bitter enemies respected the neutrality and intermingled about the fort. But this opportunity to take revenge on the hated Blackfoot was too much for the Assiniboinés and Cree. Thinking that they would catch the camp unguarded, they had launched the attack in the hope of winning a quick and easy victory.

Even half asleep and hungover, a Blackfoot warrior was a formidable foe, and the besieged camp quickly rallied to fight off the attack until reinforcements could arrive from other camps in the vicinity.

The commander of the Fort would probably have preferred fighting on the side of the Assiniboinés and Cree, but under the circumstances he was obliged to aid the Blackfeet in order to enforce the neutrality of the Fort. Gun fire from the fort soon drove the attackers off and peace was restored.

The fight made a deep impression on Bodmer, and he later painted a picture to depict the battle. Among those engaged in the fighting was a Blackfoot warrior named Bear Chief. He had posed for Bodmer a few days before the fight. He emerged unscathed from the fighting and was firmly convinced that he had survived only because of the strong medicine that came from having his picture painted. Thus it was that Bodmer



Big Soldier, a Teton Sioux Chief. Painted in 1833. Used by Permission of the Smithsonian Institution.

gained a reputation as a dispenser of good medicine among the Blackfeet as Catlin had gained a reputation for bad medicine among the Sioux.

After the battle, the Blackfeet moved all of their tepees in closer to the walls of the stockade for additional protection. This unusual clustering gave Bodmer opportunity to get the entire encampment on a single canvas. This picture, showing the various sizes of tepees, gives us an insight to the various levels of affluence and family size that could be found within the tribe.

Maximilian had planned to spend the winter in the Rocky Mountains, but now both whites and Indians advised him that it would be folly to follow his plan in view of the intertribal hostilities that existed in the area.

Personnel at the fort set about to build a boat to transport Maximilian's party downstream. In the meantime, Bodmer worked feverishly to finish as many drawings as possible.

The party left Fort McKenzie on September 14 and headed downstream with their boat loaded with plant and animal specimen and Indian artifacts. Floating along on



Teton Sioux Woman and Assiniboine Child. An engraving made in 1833. The woman's portrait was made at Fort Pierre. Used by permission of the Smithsonian Institution.

the current, Bodmer made sketches of the passing scene. Among the drawings made at this time was one of a herd of buffalo that came to the river to drink. Thirteen days later they arrived at Fort Union.

They rested long enough for them to join in with a party on a buffalo hunt. Bodmer made sketches of the hunt and other pastoral scenes including a herd of buffalo grazing on a grassy plain dotted with an occasional grove of trees.

At Fort Union, Bodmer must have thought about the uncertain relations that could exist between a white traveler and the various tribes he encountered. For there he was soon busy painting portraits of Assiniboinés and Crees — members of the same tribe that his companions had been shooting at Fort McKenzie.

The party left Fort Union on October 30 with the intention of spending the winter at Fort Clark. They arrived at that fort on November 9.

While at Fort Union, Maximilian spent the winter gathering data and making notes about the Mandans. Among those he interviewed was old Toussaint Charbonneau who had made the trip to the



This picture was painted at Fort McKenzie after a party of Assiniboine and Cree warriors attacked a small party of Blackfeet warriors camped under the walls of the Fort. Used by permission of the Smithsonian Institution.

Pacific Coast with Lewis and Clark. However, Maximilian was more concerned about what Charbonneau knew about the history and customs of the Mandans than he was of his reminiscences of that historic journey.

Bodmer spent the time painting. The party had arrived just at the time the tribe was moving into winter quarters in the wooded lowlands near the river. Bodmer was anxious to do a painting of the interior of a Mandan lodge and persuaded one family to delay their move until he finished his picture. When done, that picture shows Bodmer at his best. With its contrast of light and shadow, the picture is in some ways reminiscent of Seymour's painting of the interior of a Kansa lodge, but Bodmer was the better craftsman, and his picture is of sufficient detail to have historic as well as artistic value.

The winter of 1833-34 was a cold one. Frequently Bodmer had to thaw out his colors with hot water before he could paint. He sketched many of the Indian's elaborate ceremonies such as the Hidatsa's scalp dance, dances performed by the women's societies and the dance of the Mandan men's buffalo society.

In the final paintings made from these sketches, it was necessary to capture a milling throng of individ-

uals as though frozen in a moment of frenzied activity, yet with each individual caught in a realistic pose that harmonized with pose of all the other participants to make a composition that was artistically pleasing. The pictures that resulted from Bodmer's sketches testify to his talent.

Among the Mandans who posed for Bodmer during this period were two Indians who had also posed for Catlin the year before. They were Four Bears and Yellowfeather, and they now started to show a keen interest in the white man's art. With Bodmer's encouragement, they started to show a talent for realism that no Indian of that region had even shown before.

Quite possibly they might have developed into the first modern Indian artists, but promising careers were nipped in the bud, first by the death of Yellowfeather who was killed in battle and later by the death of Four Bears who died as a result of a smallpox epidemic in 1837.

Bodmer and Maximilian left Fort Clark on April 18, 1834 and in due course returned to Europe. By terms of their contract, Bodmer's paintings belonged to Maximilian and were used to illustrate his book "Reise in Das Innere Nord America in Den Jahren 1832 Bis 1834." Only recently has an English translation been made

available in this country. Although the originals belonged to the Prince, Bodmer followed the custom and made multiple copies to sell for his own profit. Many of these copies have since found their way into art museums in the United States. After his return to Europe, Bodmer gained fame as an artist from paintings made after his American tour.

Since he and Catlin covered much of the same territory and even painted many of the same people, it is natural to compare them. Where Catlin was a primitive, Bodmer was well trained and his pictures show a professional quality not found in Catlin's work. Where Catlin painted in oils, Bodmer's principle medium was water color.

Although both painted on the upper Missouri each also ventured into territory not visited by the other. Both thought of themselves as illustrators rather than as artists. Catlin painted to illustrate his book, Bodmer to illustrate the book to be written by Maximilian. Yet each man's art became better known than the material it illustrated. Catlin painted scenes from Mandan life in the summer, Bodmer in the winter.

Catlin was more prolific — often starting several paintings in a single day, but rarely did he fill in backgrounds and other details until later. Bodmer was more meticulous. He never laid a painting aside until he was through with it. As a result his paintings are more accurate in detail. Bodmer's training shows in his work and on the whole he was the better artist.

It is fortunate that both men spent so much time with the Mandans. Among the tribes they were remarkable — consistently friendly with the whites, more agricultural than warlike and in many ways a unique people. As it happened, the work of the two men was timely. In 1837 — four years after Bodmer's visit — the tribe was virtually destroyed by an epidemic of smallpox. The few individuals who survived were absorbed into nearby tribes. Much of what we know about these remarkable people comes from the work of the two artists.

Public Land Sales

No public land tracts were scheduled for sale at the time this issue went to press.

STATE OFFICES U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

ALASKA:

555 Cordova Street
Anchorage, AK 99501

ARIZONA:

Valley Bank Center
Phoenix, AZ 85073

CALIFORNIA:

Federal Building, Room E-2841
2800 Cottage Way
Sacramento, CA 95825

COLORADO:

Colorado State Bank Building
1600 Broadway
Denver, CO 80202

STATES EAST OF THE MISSISSIPPI RIVER, PLUS IOWA, MINNESOTA, MISSOURI, ARKANSAS AND LOUISIANA:

Eastern States Office
7981 Eastern Avenue
Silver Spring, MD 20910

IDAHO:

Federal Building, Room 398
550 West Fort Street
P. O. Box 042
Boise, ID 83724

MONTANA, NORTH DAKOTA AND SOUTH DAKOTA:

222 N. 32nd Street
P. O. Box 30157
Billings, MT 59107

NEVADA:

Federal Building, Room 3008
300 Booth Street
Reno, NV 89509

NEW MEXICO, OKLAHOMA AND TEXAS:

U.S. Post Office and Federal Building
P.O. Box 1449
Santa Fe, NM 87501

OREGON AND WASHINGTON:

729 N.E. Oregon Street
P.O. Box 2965
Portland, OR 97208

UTAH:

University Club Building
136 East South Temple
Salt Lake City, UT 84111

WYOMING, KANSAS AND NEBRASKA:

2515 Warren Ave.
P.O. Box 1828
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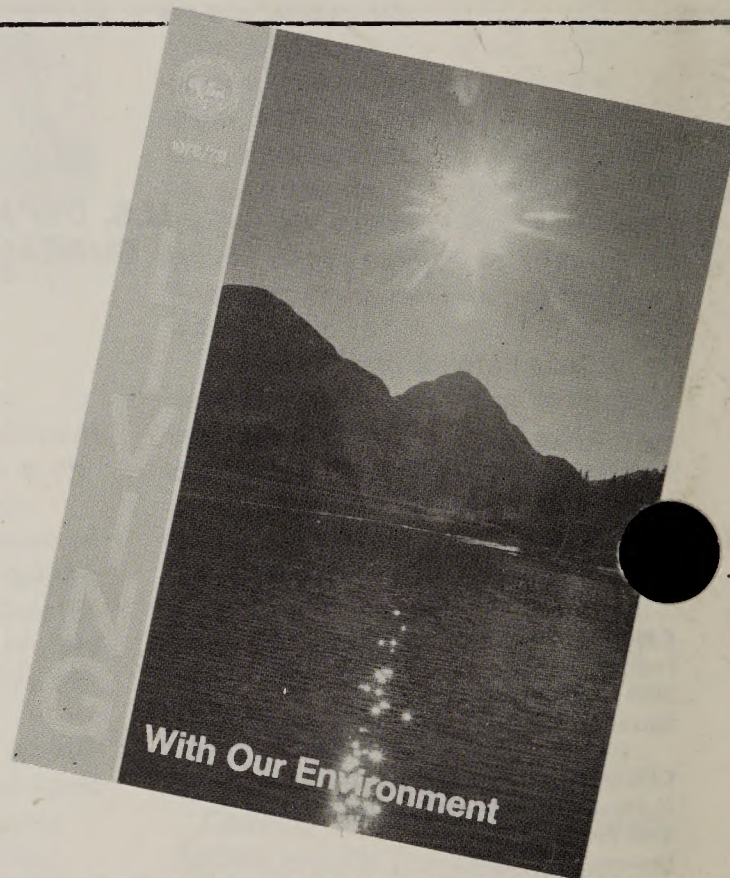


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